

FIG. 1

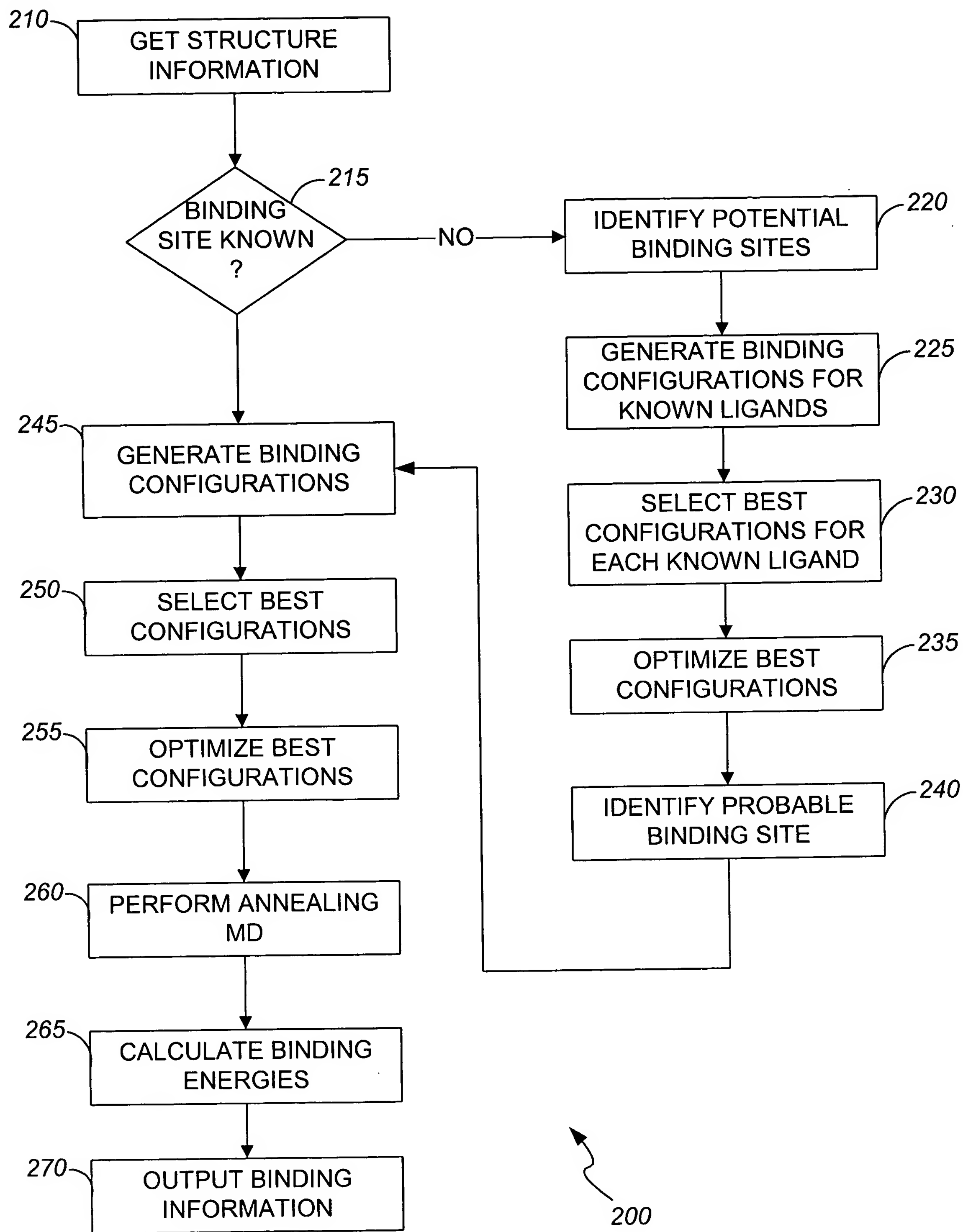


FIG. 2

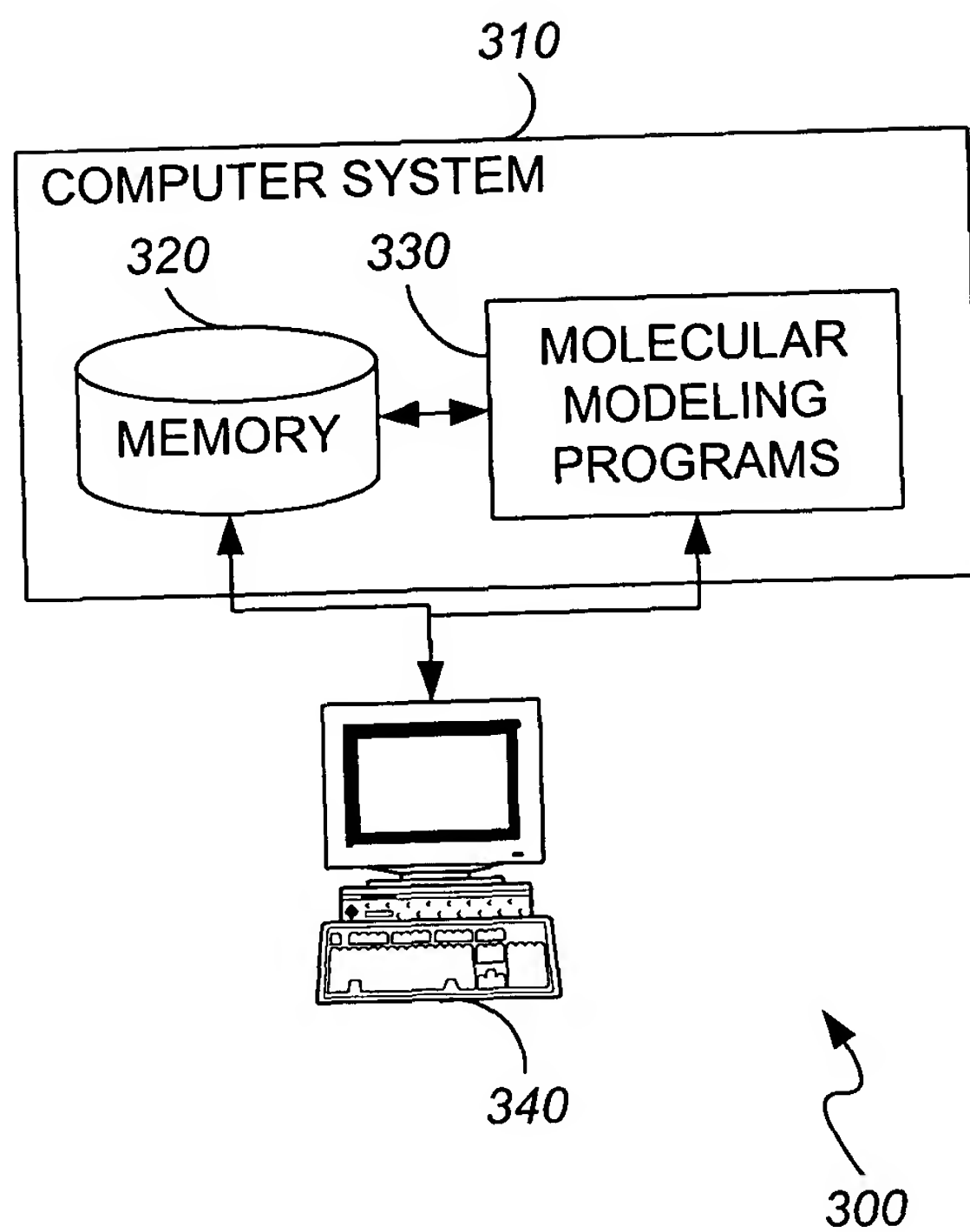


FIG. 3

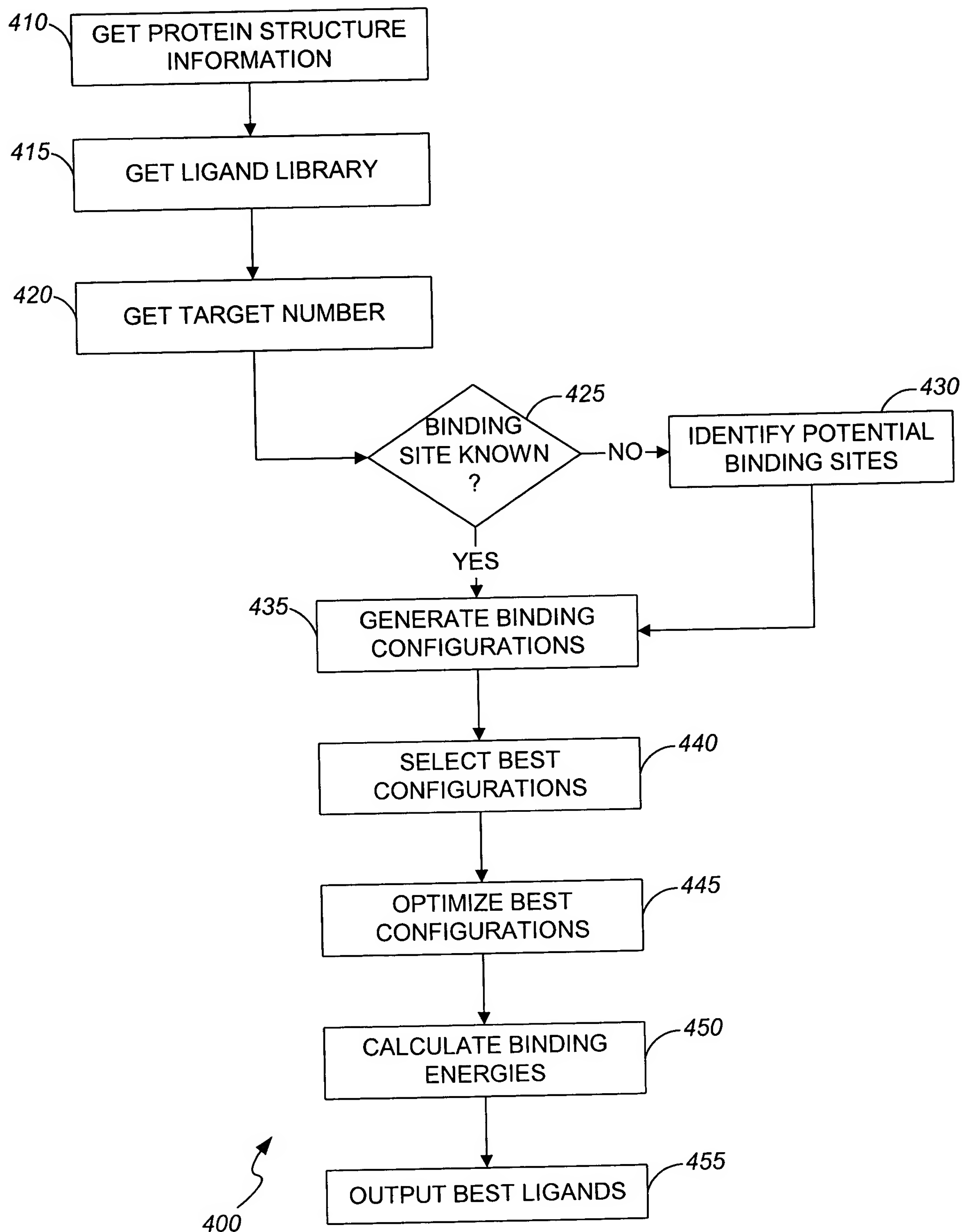
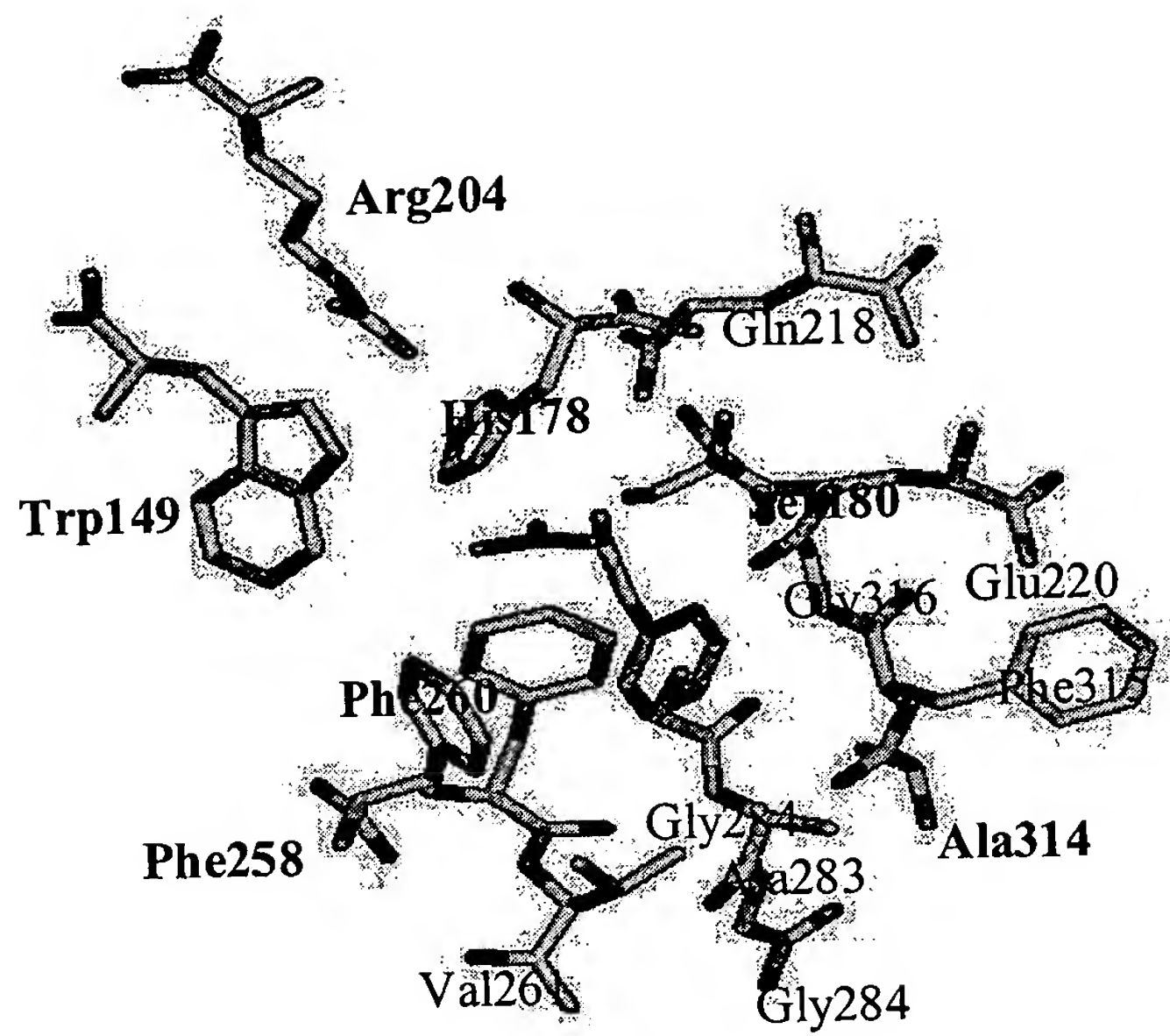
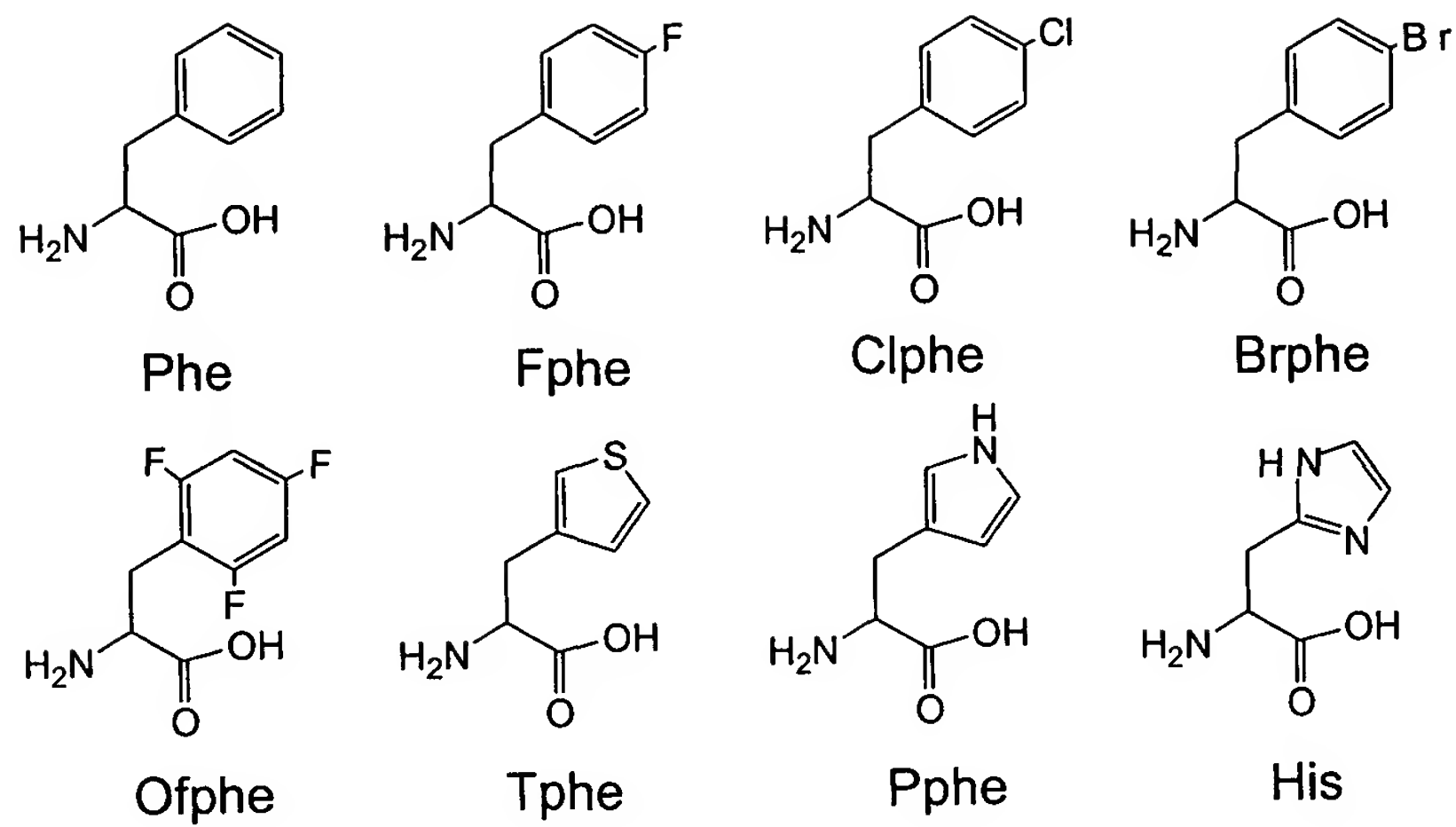


FIG. 4



**FIG. 5**



**FIG. 6**

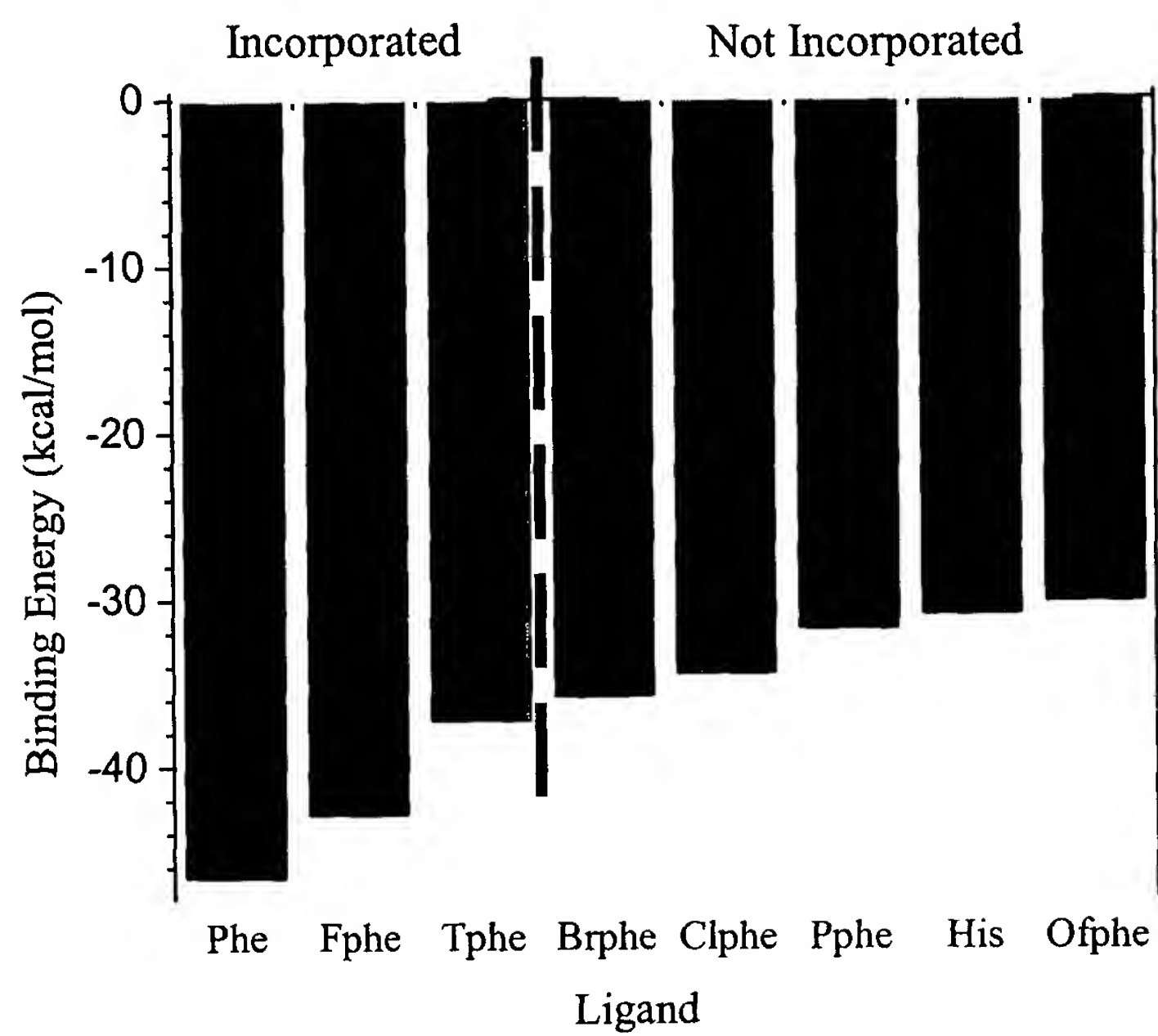


FIG. 7





Binding energies of all 20 aa to hisRS

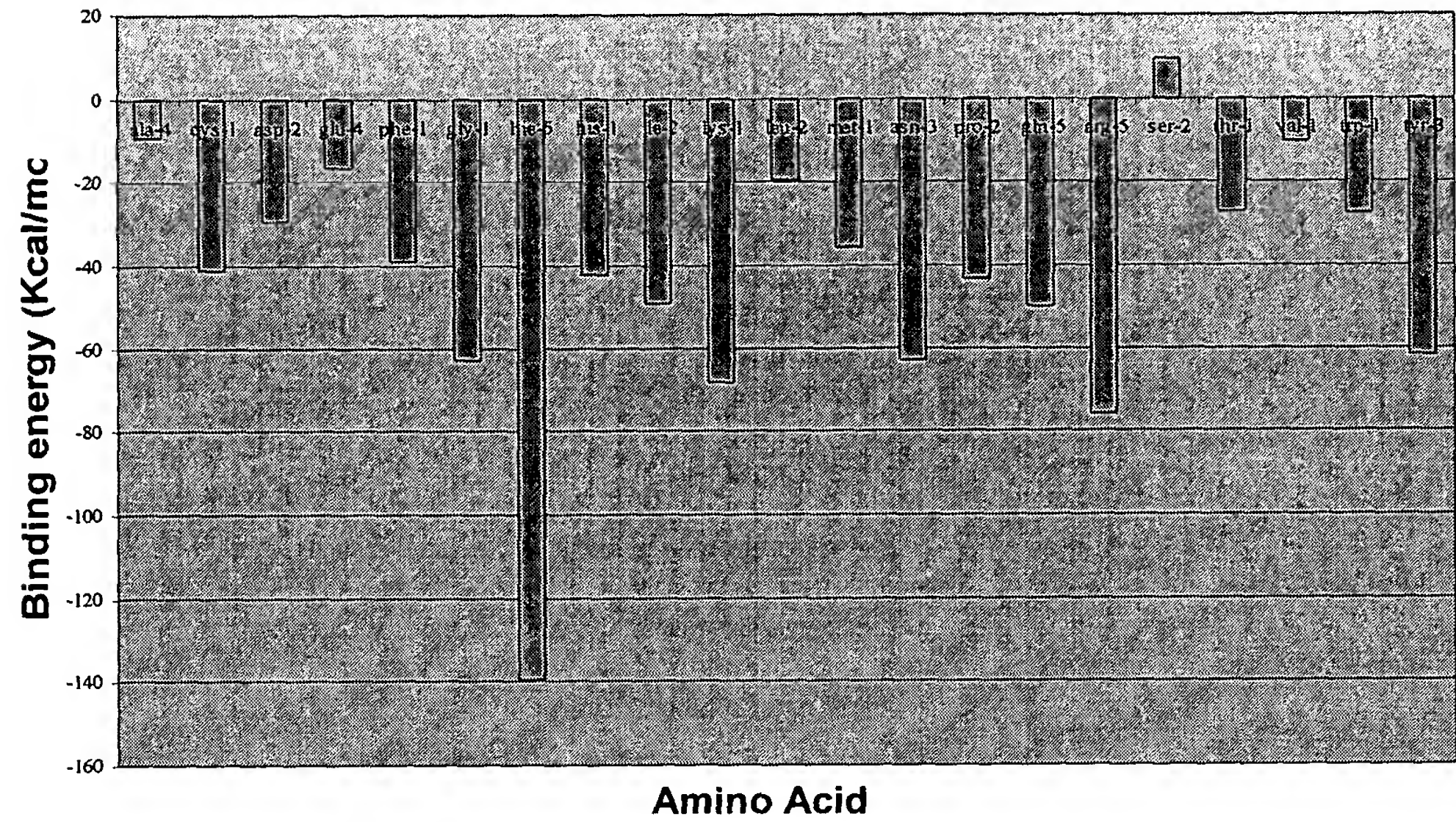


FIG. 9

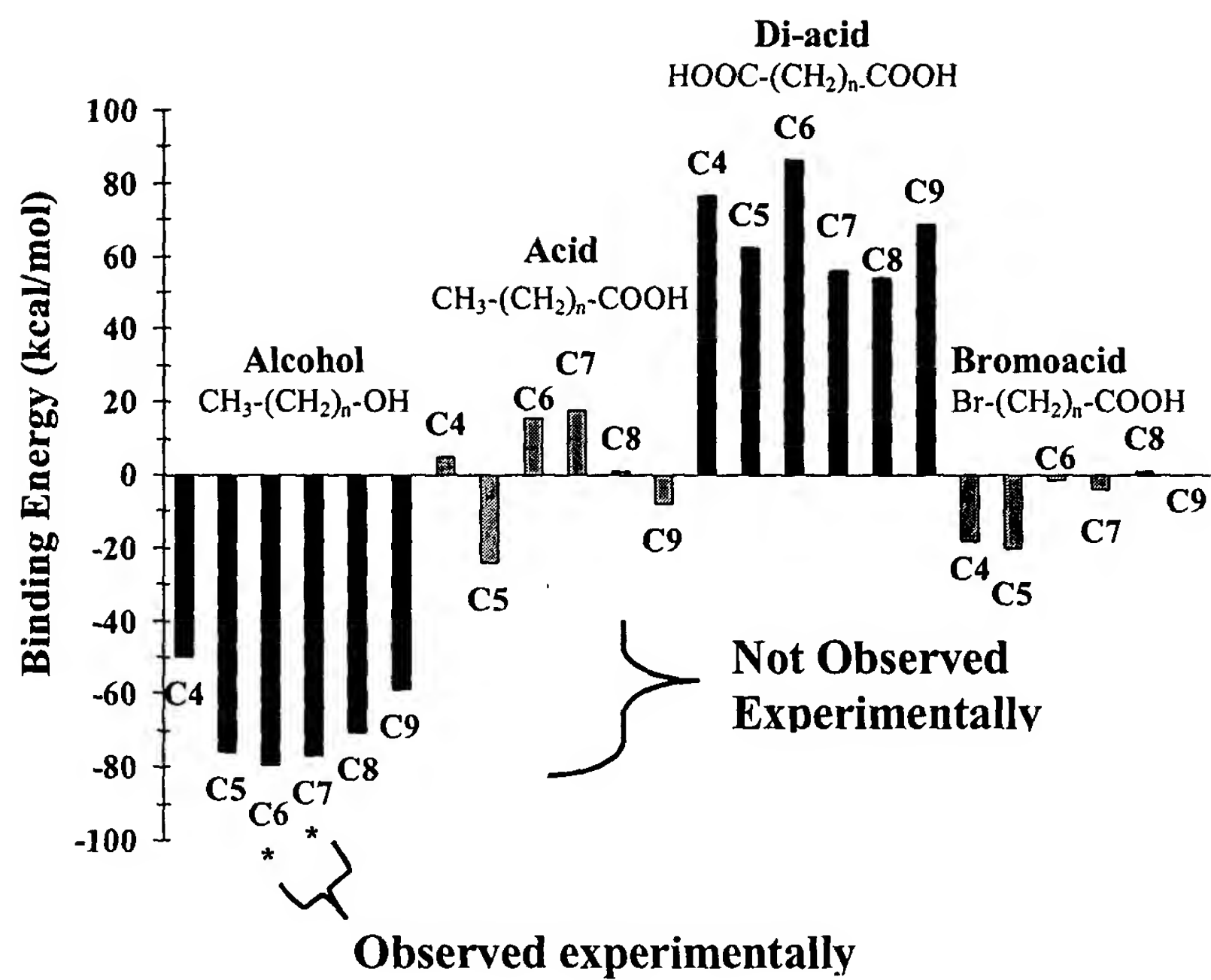


FIG. 10

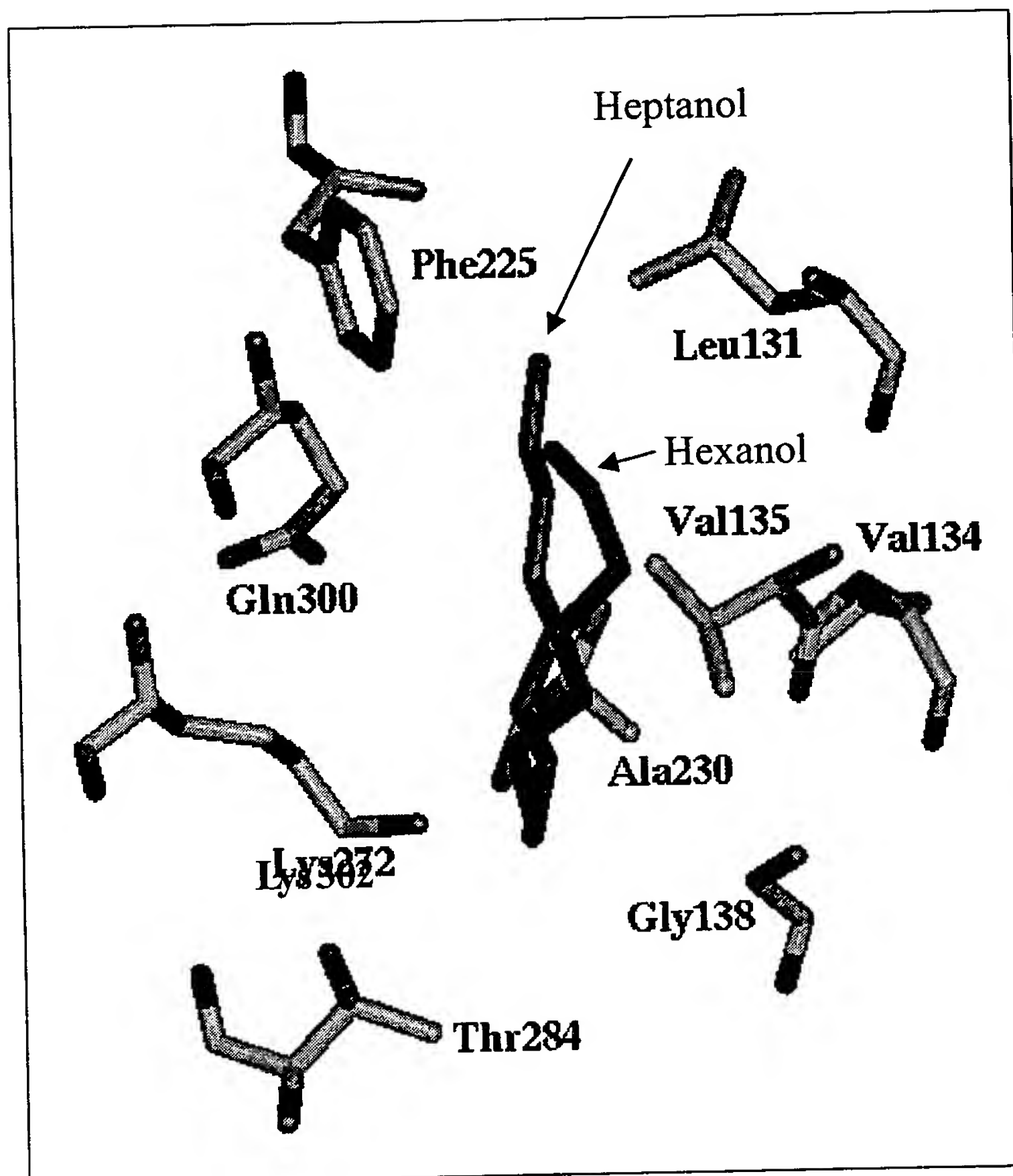


FIG. 11

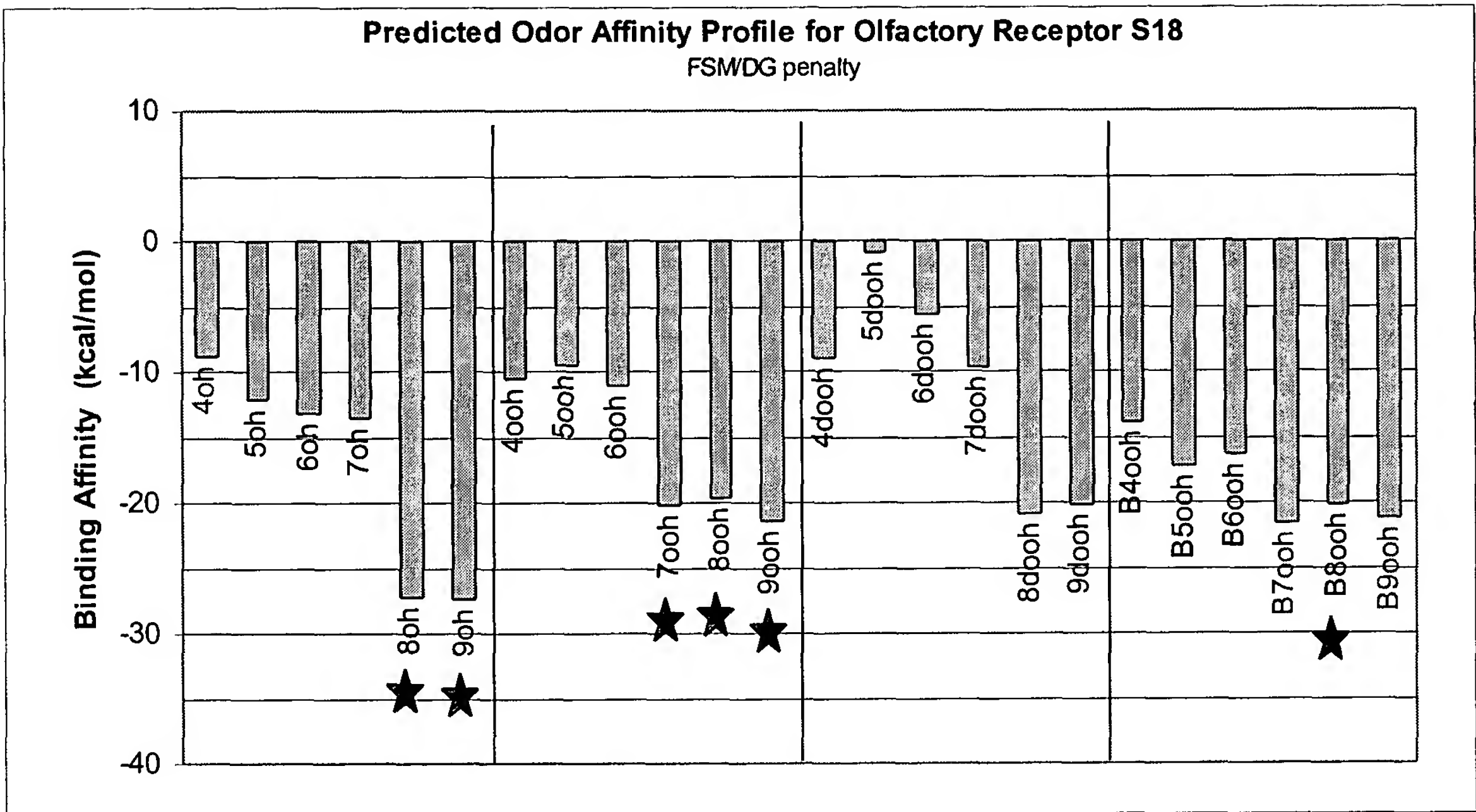


FIG. 12

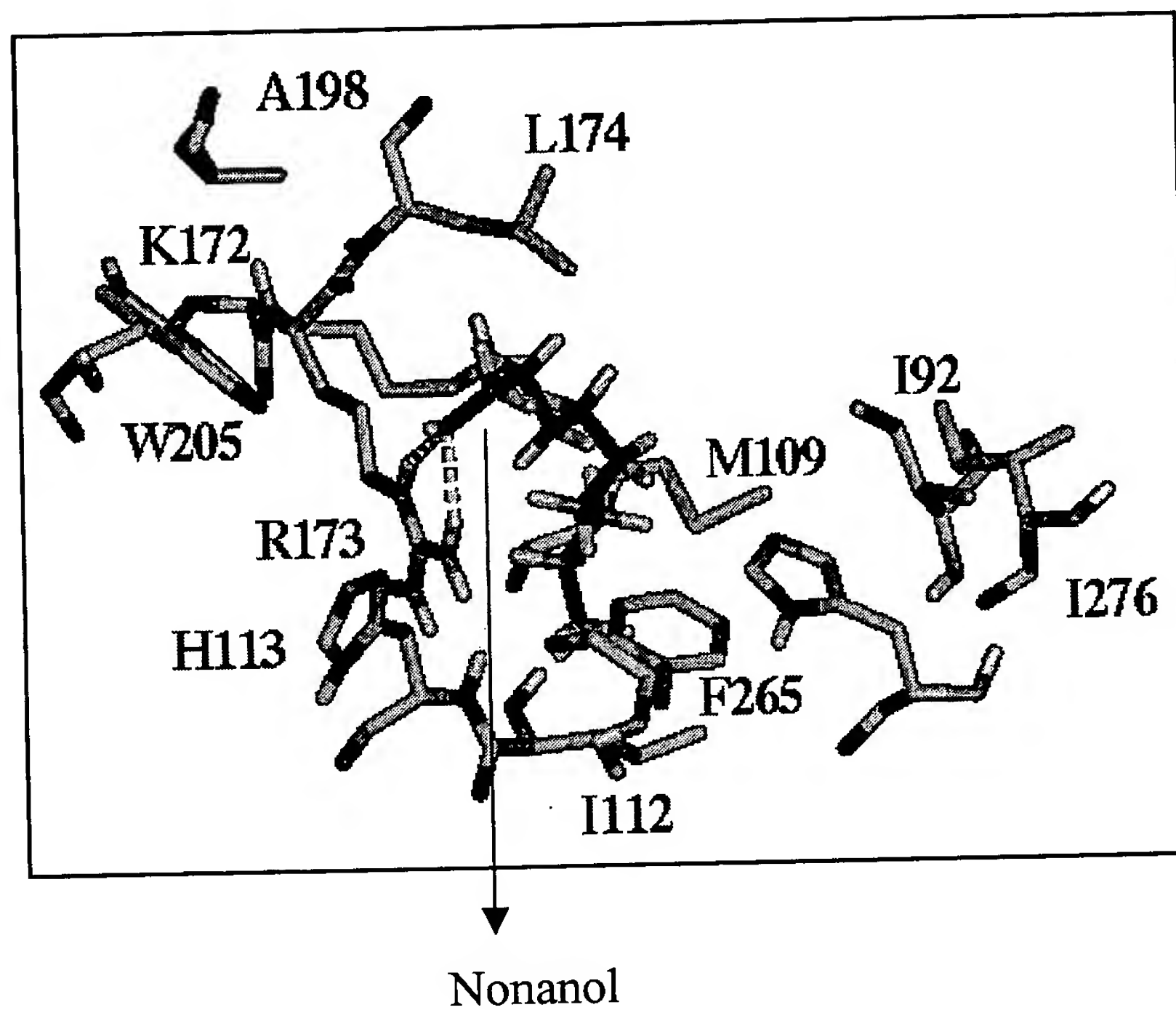
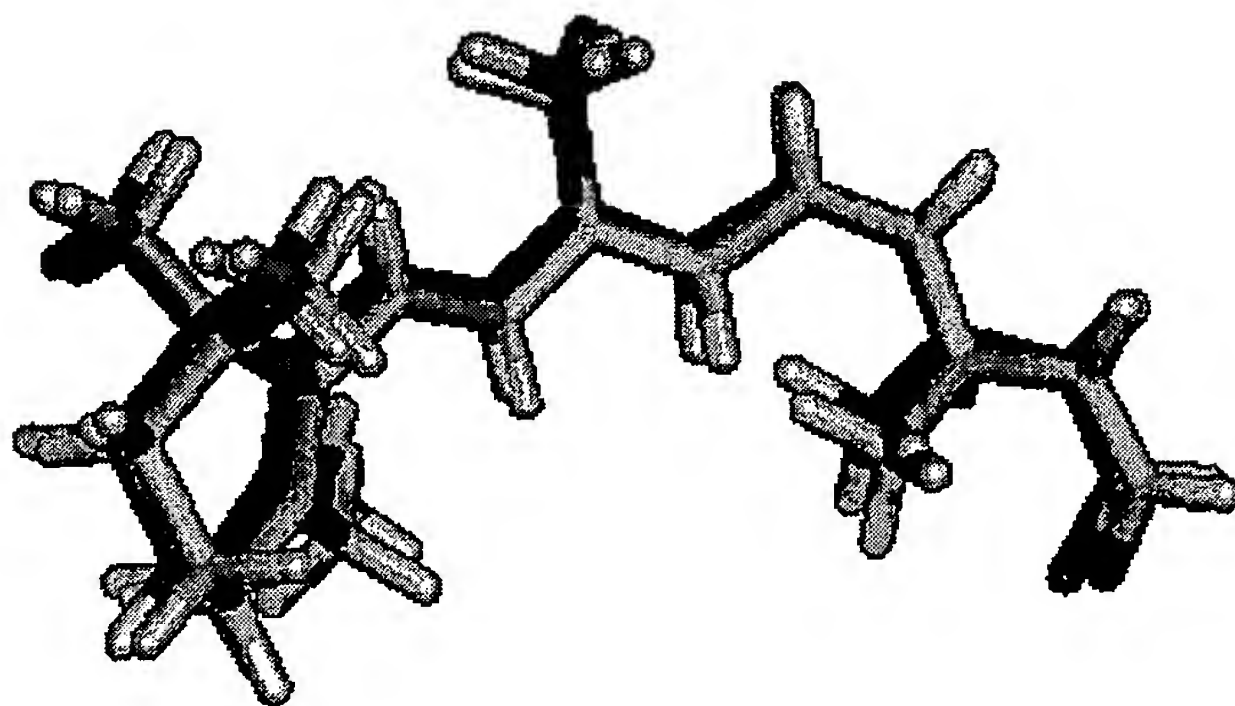


FIG. 13

Docked cis-retinal (orange) X exp. Retinal (green)



*FIG. 14*